# Jiannan LI

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# Current position

Assistant Professor, School of Computing and Information Systems, Singapore Management University

### Research Interest

Human-Computer Interaction, Human-Robot Interaction

### Education

PHD in Computer Science, University of Toronto

Advisors: Ravin Balakrishnan & Tovi Grossman

MSc in Computer Science, University of Calgary

Advisors: Ehud Sharlin & Saul Greenberg

BENG in Automation and Control, Southeast University, China

#### **Publications**

PEER-REVIEWED CONFERENCE AND JOURNAL ARTICLES

- DIS24[C.13] Setareh Aghel Manesh, Tianyi Zhang, Yuki Onishi, Kotaro Hara, Scott Bateman, Jiannan Li, and Anthony Tang. **How People Prompt to Create Interactive VR Scenes**. In *Proceedings of the 2024 ACM Conference on Designing Interactive Systems (DIS '24)*. Conditionally accepted.
- CHI23[C.12] Jiannan Li, Maurício Sousa, Karthik Mahadevan, Bryan Wang, Paula Akemi Aoyaui, Nicole Yu, Angela Yang, Ravin Balakrishnan, Anthony Tang, and Tovi Grossman. Stargazer: An Interactive Camera Robot for Capturing How-To Videos Based on Subtle Instructor Cues. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23). Acceptance rate 28.4%.
- VR23[C.11] Sixuan Wu, Jiannan Li, Mauricio Sousa, and Tovi Grossman. Investigating Guardian Awareness Techniques to Promote Safety in Virtual Reality. In Proceedings of the 30th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR '23).
- CSCW<sub>22</sub>[J.2] Kartikaeya Kumar, Lev Poretski, Jiannan Li, and Anthony Tang. 2022. **Tourgether360: Collaborative Exploration of 360° Videos Using Pseudo-Spatial Navigation**. In *Proceedings of the ACM on Human Computer Interaction (CSCW '22)*.
- CHI22[C.10] Kevin Huang, Jiannan Li, Maurício Sousa, and Tovi Grossman. 2022. **immersivePOV: Filming**How-To Videos with a Head-Mounted 360° Action Camera. In *Proceedings of the 2022 CHI*

- Conference on Human Factors in Computing Systems (CHI '22). A Honorable Mention Award (top 5%).
- CHI22[C.9] Jiannan Li, Maurício Sousa, Chu Li, Jessie Liu, Yan Chen, Ravin Balakrishnan, and Tovi Grossman. 2022. **ASTEROIDS: Exploring Swarms of Mini-Telepresence Robots for Physical Skill Demonstration**. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22)* Accepted with minor revision, acceptance rate 12.5%.
- UIST21[C.8] Jiannan Li, Jiahe Lyu, Maurício Sousa, Ravin Balakrishnan, Anthony Tang, and Tovi Grossman. 2021. Route Tapestries: Route Tapestries: Navigating 360 Virtual Tour Videos Using Slit-Scan Visualizations. In Proceedings of the 34th Annual ACM Symposium on User Interface Software and Technology (UIST '21). Acceptance rate 25.9%.
- UIST21[C.7] Jiangtao Gong, Teng Han, Siling Guo, Jiannan Li, Siyu Zha. 2021. **HoloBoard: an Immersive Teaching Board for Lecture-based Classes**. In *Proceedings of the 34th Annual ACM Symposium on User Interface Software and Technology (UIST '21)*. Acceptance rate 25.9%.
- CHI21[C.6] Zhicong Lu, Chenxinran Shen, Jiannan Li, Hong Shen, and Daniel Wigdor. 2021. More Kawaii than a Real-Person Live Streamer: Understanding How the Otaku Community Engages with and Perceives Virtual YouTubers. In *Proceedings of 2021 SIGCHI Conference on Human Factors in Computing Systems (CHI '21)*. Acceptance rate 26.3%.
- GI20[C.5] Jiannan Li, Ravin Balakrishnan, and Tovi Grossman. 2020. **StarHopper: A Touch Interface** for Remote Object-Centric Drone Navigation. In *Proceedings of the 2020 Graphical Interface Conference (GI '20)*.
- CHI19[C.4] Teng Han, Jie Liu, Khalad Hasan, Mingming Fan, Junhyeok Kim, Jiannan Li, Xiangmin Fan, Feng Tian, Edward Lank, and Pourang Irani. 2019. **PinchList: Leveraging Pinch Gestures for Hierarchical List Navigation on Smartphones**. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*. Acceptance rate 23.8%.
- CHI18[C.3] Teng Han, Jiannan Li, Khalad Hasan, Keisuke Nakamura, Randy Gomez, Ravin Balakrishnan, and Pourang Irani. 2018. PageFlip: Leveraging Page-Flipping Gestures for Efficient Command and Value Selection on Smartwatches. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18). Acceptance rate 25.7%.
- IJHCS[J.1] Jiannan Li, Saul Greenberg, Ehud Sharlin. 2017. A Two-Sided Collaborative Transparent Display Supporting Workspace Awareness. In *International Journal of Human Computer Studies* (Int J HCS), 101:23-44.
- DIS<sub>14</sub>[C.2] Jiannan Li, Saul Greenberg, Ehud Sharlin, and Joaquim Jorge. 2014. **Interactive two-sided** transparent displays: designing for collaboration. In *Proceedings of the 2014 conference on Designing interactive systems (DIS '14)*. Acceptance rate 27%.
- ICCSNTII[C.1]Jiannan Li, Pengbo Li, Hongyi Liu, Dong Li, and Jian Tang. 2011. A Contactless Battery Charging and Monitoring System for Wireless Sensor Network Nodes. In Proceedings of 2011 International Conference on Computer Science and Network Technology (ICCSNT'11).

#### PRE-PRINTS

Rahul Arora, Jiannan Li, Gongyi Shi, and Karan Singh. 2021. **Thinking Outside the Lab: VR Size & Depth Perception in the Wild**. arXiv:2105.00584.

# Posters & Workshops

CHILBW24 Nikhita Joshi, Richard Li, Jiannan Li, Leonardo Pavanatto, Michel Pahud, Jatin Sharma, Bongshin Lee, Hugo Romat, William A.S. Buxton, Nicolai Marquardt, Ken Hinckley, Nathalie Riche.

Opportunistic Nudges for Task Migration Between Personal Devices. In CHI '24 Extended Abstracts on Human Factors in Computing Systems

AIVR21 Zhuoyue Lyu, Jiannan Li, Bryan Wang. 2021. Alive: Interactive Visualization and Sonification of Neural Networks in Virtual Reality. In 2021 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR).

HAI21 Jiannan Li, Maurício Sousa, Ravin Balakrishnan, and Tovi Grossman. 2021. **Constellation: a**Multi-User Interface for Remote Drone Tours. In Proceedings of the 9th International Conference on Human-Agent Interaction (HAI '21).

CHIEA13 Jiannan Li, Ehud Sharlin, Saul Greenberg, and Michael Rounding. 2013. **Designing the car** iWindow: exploring interaction through vehicle side windows. In CHI '13 Extended Abstracts on Human Factors in Computing Systems.

# Research Internships

2022 Microsoft Research, Redmond, US

With Ken Hinckley and Nathalie Henry Riche in the EPIC reserach group.

2018 Université Paris-Saclay & INRIA, Orsay, France

With Cédric Fleury and Michel Beaudouin-Lafon, on sense-making on wall-sized displays.

Lenovo Research, Beijing, China

With Xiang Cao, on novel interaction on mobile phone edges.

# **Industry Employment**

2015-16 Software engineer at Nureva Inc., Calgary, Canada

### **Awards**

Snap Creative Challenge Award
Wolfond Scholarship in Wireless Information Technology (5,000 CAD)
Ontario Trillium Scholarship (40,000 CAD per year)
Wolfond Scholarship in Wireless Information Technology (20,000 CAD)
University of Calgary Computer Science Graduate Research Award (2,000 CAD)

### **Services**

COMMITTEE MEMBER

Technical Program Committee member, ACM CHI
Technical Program Committee member, ACM ICMI
Web Chair, IEEE VR

### Reviewer

2017,20-24 ACM CHI, special recognition for outstanding reviews for CHI '22

ACM Transactions on Computer-Human Interaction

2020,22,23 ACM UIST, special recognition for outstanding reviews for UIST '22 (2)

2020,22,23 ACM CSCW, special recognition for outstanding reviews for CSCW '23 and '24

ACM IMWUT

2021,22,24 IEEE VR 2024 IEEE ISMAR 2023,24 ACM DIS

ACM CHI PLAY
ACM VRST

IEEE Transactions on Human-Machine Systems
International Journal on Human-Computer Studies

2014,15,22 ACM TEI 2016,17 IEEE RO-MAN

# Supervision & Mentoring

PhD Student

Tianyi Zhang (SMU, co-advised with Tony Tang)

Master Student

Setareh Aghel Manesh (SMU, visiting student from UCalgary), [C.13]

Paula Akemi Aoyagui (UToronto), [C.12]
Nicole Sin Ting Yu (UToronto), [C.12]

Chu Li (UToronto), [C.9]

RESEARCH ENGINEER

Emran Poh (SMU)

Undergraduate Student

Angela Yang (UToronto), [C.12] 2021,22 Sixuan Wu (UToronto), [C.11]

Yuchen Fan (UToronto)

Kartikaeya Kumar (IIT Guwahati), [J.2]
Kevin Huang (UToronto), [C.10]
Jiahe Lyu (UToronto), [C.8]

# Teaching

IS133 (Web Application Development)

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Available upon request.